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(formerly 07072-097001)

a plurality of first directors;

a plurality of second directors;

\a data transfer section having a cache memory, such cache memory being coupled to the plurality of first and second directors;

a messaging network, operative independently of the data transfer section, coupled to the plurality of first directors and the plurality of second directors; and

wherein the first and second directors control data transfer between the first directors and the second directors in response to messages passing between the first directors and the second directors through the messaging network with such messages by-passing the data transfer section and with such data transfer comprising passing data through the directors to the cache memory in the data transfer section.

27. (NEW) The system interface recited in claim 26 wherein the messaging network comprises a switch network having a plurality of ports, each one of the ports being coupled to a corresponding one of the plurality of first and second directors.

28. (NEW) A system interface comprising:

a plurality of first directors;

a plurality of second directors;

a data transfer section having a cache memory, such cache memory being coupled to the plurality of first and second directors;

a messaging network coupled to the plurality of first directors and the plurality of second directors; and

wherein the first and second directors control data transfer between the first directors and the second directors in response to messages passing between the first directors and the second directors through the messaging network with such messages by-passing the data transfer section and with such data transfer comprising passing data through the directors to the cache memory in the data transfer section.



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29. (NEW) The system interface recited in claim 28 wherein the messaging network comprises a switch network having a plurality of ports, each one of the ports being coupled to a corresponding one of the plurality of first and second directors.

30. (NEW) A system interface comprising:

a plurality of first directors;

a plurality of second directors;

a data transfer section having a cache memory, such cache memory being coupled to the plurality of first and second directors;

a messaging network comprising a switch network having a plurality of ports, each one of the ports being coupled to a corresponding one of the plurality of first and second directors; and

wherein the first and second directors control data transfer between the first directors and the second directors in response to messages passing between the first directors and the second directors through the messaging network with such messages by-passing the data transfer section and with such data transfer comprising passing data through the directors to the cache memory in the data transfer section.

31. (NEW). A system interface comprising:

a plurality of directors

a data transfer section having a cache memory, such cache memory being coupled to the plurality of directors;

a messaging network, operative independently of the data transfer section, coupled to the plurality of directors; and

wherein the directors control data transfer in response to messages passing between the directors through the messaging network with such data passing through the cache memory in the data transfer section.

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32. (NEW). The system interface recited in claim 31 wherein each one of the directors includes.

a data pipe coupled between an input of such one of the directors and the cache memory; and

a controller for transferring the messages between the message network and such one of the directors.

- 33. (NEW) The system interface recited in claim 31 wherein the messaging network comprises a switch network having a plurality of ports, each one of the ports being coupled to a corresponding one of the plurality of directors.
- 34. (NEW) The system interface recited in claim 33 wherein each one of the directors includes:

a data pipe coupled between an input of such one of the directors and the cache memory; and

a controller for transferring the messages between the message network and such one of the directors.

35. (NEW) A data storage system for transferring data between a host computer/server and a bank of disk drives through a system interface, such system interface comprising:

a plurality of first directors coupled to host computer/server;

a plurality of second directors coupled to the bank of disk drives;

a data transfer section having a cache memory, such cache memory being coupled to the plurality of first and second directors;

a messaging network, operative independently of the data transfer section, coupled to the plurality of first directors and the plurality of second directors; and wherein the first and second directors control data transfer between the host

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B) D computer and the bank of disk drives in response to messages passing between at least a pair of the plurality of first and second directors through the messaging network with such data passing through the cache memory in the data transfer section.

36. (NEW) The system interface recited in claim 35 wherein each one of the first and second directors includes:

a data pipe coupled between an input of such one of the first and second directors and the cache memory;

a controller for transferring the messages between the message network and such one of the first and second directors.

37. (NEW) The system interface recited in claim 35 wherein the messaging network comprises a switch network having a plurality of ports, each one of the ports being coupled to a corresponding one of the plurality of first and second directors.

38. (NEW) The system interface recited in claim 37 wherein each one of the directors includes:

a data pipe coupled between an input of such one of the directors and the cache memory; and

a controller for transferring the messages between the message network and such one of the directors.

39. (NEW) A system interface comprising:

a plurality of directors;

a data transfer section having a cache memory, such cache memory being coupled to the plurality of directors;

a messaging network, operative independently of the data transfer section, coupled to the plurality of directors; and

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wherein the directors control data transfer in response to messages passing between the directors through the messaging network with such data passing through the cache memory in the data transfer section.

40. (NEW) The system interface recited in claim 38 wherein each one of the directors include:

a data ripe coupled between an input of such one of the directors and the cache memory;

a controller for transferring the messages between the message network and such one of the directors.

- 41. (NEW) The system interface recited in claim 40 wherein the messaging network comprises a switch network having a plurality of ports, each one of the ports being coupled to a corresponding one of the plurality of directors.
- 42. (NEW) The system interface recited in claim 41 wherein each one of the directors includes:

a data pipe coupled between an input of such one of the directors and the cache memory; and

a controller for transferring the messages between the message network and such one of the directors.

43. (NEW) A system interface comprising:

a plurality of directors;

a data transfer section having a cache memory, such cache memory being coupled to the plurality of directors;

a messaging network comprising a switch network having a plurality of ports, each one of the ports being coupled to a corresponding one of the plurality of

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directors, such message network being operative independently of the data transfer section; and

wherein the directors control data transfer in response to messages passing between the directors through the messaging network with such data passing through the cache memory in the data transfer section.

44. (NEW) A system interface comprising:

a plurality of directors;

a data transfer section having a cache memory, such cache memory being coupled to the plurality of directors;

a messaging network, operative independently of the data transfer section, coupled to the plurality of directors; and

wherein the directors control data transfer in response to messages passing between the directors through the messaging network with such messages by-passing the data transfer section and with such data transfer comprising passing data through the directors to the cache memory in the data transfer section.

45. (NEW) The system interface recited in claim 44 wherein the messaging network comprises a switch network having a plurality of ports, each one of the ports being coupled to a corresponding one of the plurality of directors.

46. (NEW) A system interface comprising:

a plurality of directors;

a data transfer section having a cache memory, such cache memory being coupled to the plurality of directors;

a messaging network coupled to the plurality of directors; and

wherein the first and second directors control data transfer in response to messages passing between the directors through the messaging network with such

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messages by-passing the data transfer section and with such data transfer comprising passing data through the directors to the cache memory in the data transfer section.

47. (NEW) The system interface recited in claim 46 wherein the messaging network comprises a switch network having a plurality of ports, each one of the ports being coupled to a corresponding one of the plurality of directors.

48. (NEW) A system interface comprising:

a plurality of directors;

a data transfer section having a cache memory, such cache memory being coupled to the plurality of directors;

a messaging network comprising a switch network having a plurality of ports, each one of the ports being coupled to a corresponding one of the plurality of directors; and

wherein the directors control data transfer in response to messages passing between the directors through the messaging network with such messages by-passing the data transfer section and with such data transfer comprising passing data through the directors to the cache memory in the data transfer section.

49. (NEW). A system interface comprising:

a plurality of directors

a data transfer section having a cache memory, such cache memory being coupled to the plurality of directors;

a messaging network, operative independently of the data transfer section, coupled to the plurality of directors; and

wherein the directors control data transfer in response to messages passing between the directors through the messaging network with such data passing through the cache memory in the data transfer section.

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50 (NEW). The system interface recited in claim 49 wherein each one of the directors includes:

a data pipe coupled between an input of such one of the directors and the cache memory; and

a controller for transferring the messages between the message network and such one of the directors.

- 51. (NEW) The system interface recited in claim 50 wherein the messaging network comprises a switch betwork having a plurality of ports, each one of the ports being coupled to a corresponding one of the plurality of directors.
- 52. (NEW) The system interface recited in claim 51 wherein each one of the directors includes:

a data pipe coupled between an input of such one of the directors and the cache memory; and

a controller for transferring the messages between the message network and such one of the directors.

53. (NEW) A data storage system for transferring data between a host computer/server and a bank of disk drives through a system interface such system interface comprising:

a plurality of first directors coupled to host computer/server;

a plurality of second directors coupled to the bank of disk drives;

a data transfer section having a cache memory, such cache memory being coupled to the plurality of first and second directors;

a messaging network, operative independently of the data transfer section, coupled to the plurality of first directors and the plurality of second directors; and wherein the first and second directors control data transfer between the host

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computer and the bank of disk drives in response to messages passing between at least a pair of the plurality of first and second directors through the messaging network with such data passing through the cache memory in the data transfer section.

54. (NEW) The system interface recited in claim 53 wherein each one of the first and second directors includes:

a data pipe coupled between an input of such one of the first and second directors and the cache memory;

a controller for transferring the messages between the message network and such one of the first and second directors.

55. (NEW) The system interface recited in claim 54 wherein the messaging network comprises a switch network having a plurality of ports, each one of the ports being coupled to a corresponding one of the plurality of first and second directors.

56. (NEW) The system interface recited in claim 55 wherein each one of the directors includes:

a data pipe coupled between an input of such one of the directors and the cache memory; and

a controller for transferring the messages between the message network and such one of the directors.